

## Abstract

5       The cellular response to ultraviolet radiation exposure has been characterized on the  
molecular level through the use of high density gene array technology. Nucleic acid molecules  
and protein molecules, the expression of which are repressed or induced in response to ultraviolet  
radiation exposure, are identified according to a temporal pattern of altered expression post  
ultraviolet radiation exposure. Methods are disclosed that utilized these ultraviolet radiation-  
regulated molecules as markers for ultraviolet radiation exposure. Other screening methods of  
10   the invention are designed for the identification of compounds that modulate the response of a  
cell to ultraviolet radiation exposure. The invention also provides compositions useful for drug  
screening or pharmaceutical purposes.

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